Assessment Test

Open Transit Data (OTD) is a platform where Department of Transport (Govt of NCT of Delhi) in association with IIIT-Delhi now publishes transit datasets (static and dynamic/real-time) for enterprises, third-party developers, researchers, and other members of the public to promote collaboration and co-creation of innovative and inclusive transport solutions. (https://otd.delhi.gov.in). The data is made available in General Transit Feed Specification (GTFS) format (https://otd.delhi.gov.in/documentation/). Due to some reasons, the buses are unable to follow the exact time schedule as defined in the OTD.

So your task is to make a report (including some graphs, inferences, etc) on analysis of the schedule followed by the buses and their actual defined schedules.

Data required can be found here:
1. Static data - https://otd.delhi.gov.in/data/static/
2. Real Time Data - https://otd.delhi.gov.in/data/realtime/
3. Past data from 1 August - 6 August SQL table - Here

Libraries to install -

```
- pip install --upgrade gtfs-realtime-bindings
- pip install requests
```

API link -
https://otd.delhi.gov.in/api/realtime/VehiclePositions.pb?key=aw6ZI9SDxE9a4chXMwmlRwMvPVvxG8Ad

Fetching data from feed -

```
from google.transit import gtfs_realtime_pb2
import requests


feed = gtfs_realtime_pb2.FeedMessage()
response = requests.get(API_URL)
feed.ParseFromString(response.content)
for entity in feed.entity:
    vehicle_id = entity.vehicle.vehicle.id
    vehicle_lat = entity.vehicle.position.latitude
    vehicle_lon = entity.vehicle.position.longitude
    vehicle_route_id = entity.vehicle.trip.route_id
    vehicle_timestamp = entity.vehicle.timestamp
```

So you can use any language you want but Python(Flask/Django) recommended.
Deadline - Midnight, 11th August (Sunday)